SNAPSCAN 310

Owner's Guide

Preface

This chapter gives you information about SnapScan™, about the organization, and how to use this online guide.

Chapter 1 — Preparing the scanner

"Preparing the scanner" explains how to prepare your SnapScan for installation.

Chapter 2 — Installing the scanner for the Macintosh computer

This chapter tells you how to set up your SnapScan for the Apple® Macintosh®.

Chapter 3 — Installing the scanner for the PC

This chapter shows you how to set up your SnapScan for the PC.

Appendix A — Troubleshooting

"Troubleshooting" can be helpful when you come across problems.

Appendix B — Technical information: SnapScan 310

This appendix provides specifications for your SnapScan 310.

Appendix C — Regulation compliance

This appendix gives you information about safety regulations and electromagnetic interference.

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The complete picture.

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Conventions

The following conventions are used in this guide:

- ❖ Note: a note of this type gives you additional information.
- ■ Instructions are preceded by a small red square.

1. Numbered steps describe the actions you must take to perform a task.

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Preface

About SnapScan

Environmental requirements

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About SnapScan

The SnapScan 310 is a one pass 10-bit flatbed color scanner with a resolution of 300 x 600 ppi equiped with a cold cathode lamp. It is based on CCD (Charge Coupled Device) scanning technology. With the SnapScan 310, you can scan line-art, gray-scale and color reflective originals up to A4 format.

The scanned data is transferred to the computer through SCSI. The computer can be an Apple Macintosh or PC.

In this Owner's guide, the name SnapScan is used for the SnapScan 310.

SnapScan is a scanner that captures and converts reflective originals (e.g. pictures, text) into electronic data that can be used in computer applications. It offers high-resolution image capturing and is an ideal tool in making presentations come to life.

SnapScan supports multiple scanning modes and includes scanner software to get you started right away. With its powerful and easy-to-use scanner driver software, SnapScan gives you easy access to high-quality color scans. The scanner driver software gives you a number of additional features to create special effects or to reproduce even the most difficult originals.

The document cover is adjustable: when you put a thicker original (like a book or a magazine) on the reflective glass plate, the document cover adapts itself to its thickness.

Environmental requirements

- Place the scanner on a horizontal, flat surface.
- To ensure proper ventilation, allow a minimum of 10 cm (4 inches) free space around each side of the scanner.
- Make sure that no vibrations or shocks occur.
- Make sure that the area is free of dust.
- Avoid any contact with water.
- Your SnapScan is designed to perform at best when the environmental temperature is between 10 °C and 40 °C. Avoid exposure to direct sunlight and heating devices.
- Your SnapScan is designed to perform at best when the environmental humidity is between 20% and 85%. Avoid environments where humidity fluctuations might occur.
- Check whether the voltage of the power cord corresponds to the voltage in your area. If it does not correspond, contact your dealer. Avoid environments where voltage fluctuations might occur.

Precautions

For your own safety and that of your equipment, respect conscientiously the environmental requirements and always take the following precautions:

Caution: For the reason of safety, besides the personal maintenance mentioned in this Owner's Guide, don't try to remove any mechanical parts or any electronic devices. If you need service, our dealer and service offices are available to help you.

- Handle your SnapScan with care: the glass plate is fragile. There is no warranty on breaking the glass plate and your dealer is not liable for consequential damages.
- Check frequently whether there is no overheating of the power plug and whether the power plug is pushed all the way into the socket.
- Switch off the machine at the end of your working day or during power failure.
- Disconnect the power plug when you want to clean the scanner housing or the glass plate and when the scanner needs servicing or repairing.
- Do not open the scanner housing as it contains high voltage areas and sensitive components. Every repair should be carried out by your dealer.
- Do not leave originals on the reflective glass plate for excessive periods of time. The warmth of the scanner may cause them to deteriorate.
- To avoid crashes, never use extension cables for SCSI cables.
- For safety reasons, never use extension cables for power cords.

Cleaning your scanner

- Cleaning the glass plate regularly, will ensure that dirt or smudges do not reduce the quality of your scanned images.
- Before cleaning, turn off the power of the scanner and disconnect the power cord.
- Use a damp cloth and a mild detergent to clean the surface of the glass plate . If you use alcohol to clean the glass plate, make sure you do not touch the plastic elements of the scanner.
- Avoid using sprays directly onto the glass plate as this may cause the liquid to penetrate the seams around the glass and contaminate the mirrors and lenses inside the scanner.
- Do not use liquid cleaners or aerosol cleaners.

SCSI devices

SnapScan is a Small Computer System Interface (SCSI) device. It communicates with your computer via the SCSI cable and SCSI card of your computer. The SCSI communication allows you to have up to seven devices connected to your computer. Examples of SCSI devices are a SCSI Hard Disk, a SCSI CD-ROM drive, ...

A unique SCSI identity (SCSI ID) number is assigned to each device in the SCSI chain. So the computer can identify the device it wants to communicate with.

A SCSI chain requires an electronic component called a terminator.

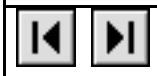
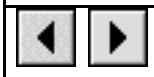
A terminator absorbs old signals traveling along the cables and keeps the path open for new signals. The chain should never have more than two terminators, one at each end.

It is important to remember that using too many or too few terminators may damage your SCSI devices. Some SCSI devices have built-in terminators and must therefore be placed at the end of your SCSI chain.

❖ Note: Your SnapScan does not have a built-in terminator.

Caution: If two SCSI devices have the same ID number, your system will not work properly and you may damage your SCSI devices. For more information see Choosing a SCSI ID number.

How to use this guide

Chapter 1, "Installing FotoLook" Chapter 2, "FotoLook reference" Chapter 3, "Setting up your monitor" Chapter 4, "Profile Setup in FotoLook" density (fog) conversion is	Click any text or graphic that is identified as **hypertext link**. The pointer changes into a pointing finger when positioned over a link. **Underlined** text is "linked" to another part of this guide. **Dotted underlined** text is "linked" to the glossary in this guide. Click Go Back to return to the previous page view.
Preface 1 — Installing FotoLook 2 — FotoLook reference 3 — Setting up your monitor 4 — Profile Setup in FotoLook	Click on the **bookmark** name to go to the topic marked by that bookmark. Click the triangle to the left of a bookmark to show and hide subordinate bookmarks.
	Use the **First Page** or **Last Page** button to move the document to the first or last page of this manual.
	Use the **Go Back** and **Go Forward** buttons to retrace your steps in this guide, moving to each view in the order visited.
	Use the **Previous Page** or **Next Page** button to move the document backward or forward, one page at a time. You can also use the keyboard arrows.
	Use the **zoom tools** to magnify and reduce the page display.
	Click the **Find** button to search for part of a word, a complete word, or multiple words in this document. You can also consult the supplied index.
	Click the **Help** button to display the Acrobat Reader Help.
Print	Choose **Print** from the File menu to print this online guide.

How to print this online guide

1. Choose Page Setup from the File menu.
2. Choose A4 from the Paper pop-up menu.
3. Select Orientation: Portrait.
4. Click OK.
5. Choose Print from the File menu.

Chapter 1 — Preparing the scanner

This chapter helps you to prepare your SnapScan for installation.

Unpacking the scanner

Unlocking the scanner

Locking the scanner

Taking a closer look

Performing a power-on test

Unpacking the scanner

1. Open the packing box and carefully take out all the items.
2. Check each item to make sure that you have everything listed on the box and the packing list. Check if there is no visible defect.

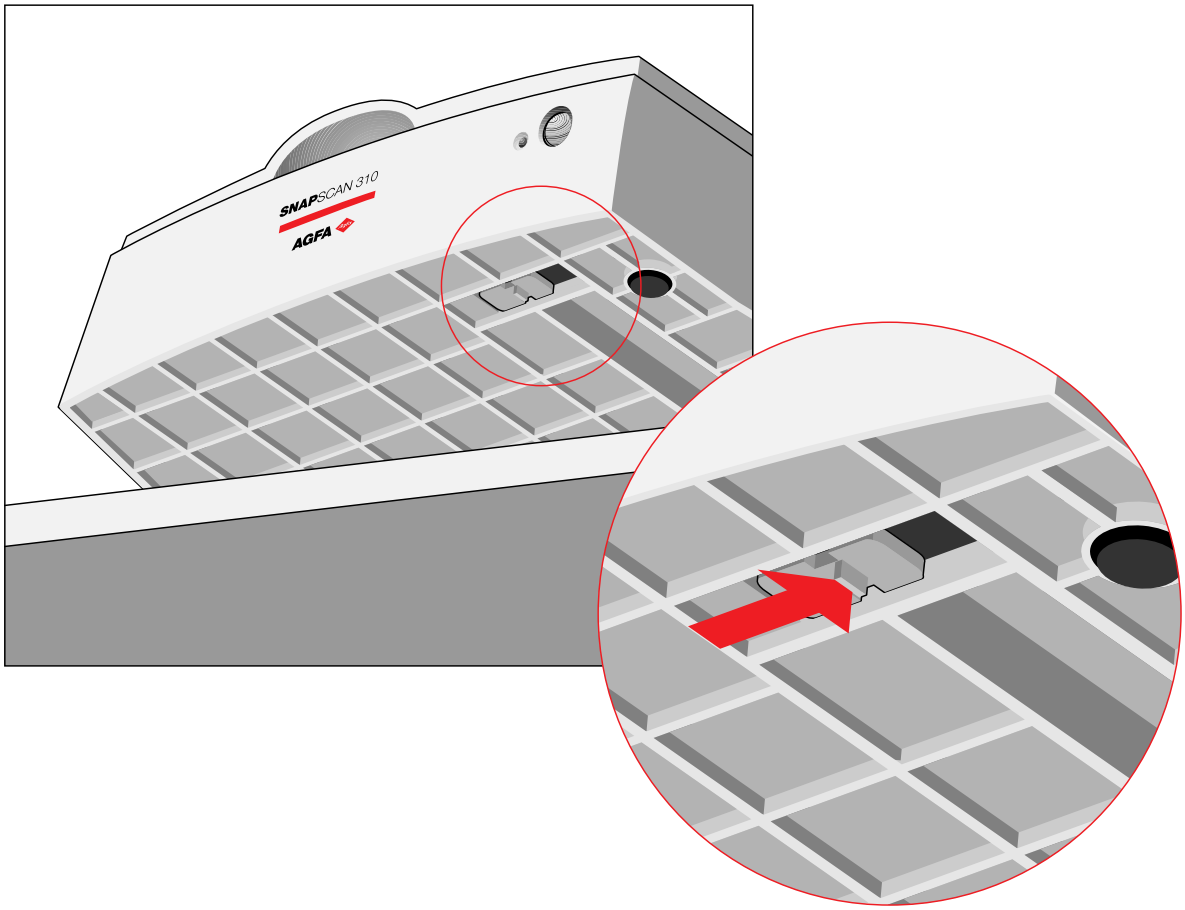
   If something is missing, contact your dealer.
3. Remove the plastic wrapping and the packing materials from the scanner.
   - ❖ Note: Save the packing materials to protect the scanner during later transport.

Unlocking the scanner

The scanner's optical box contains all optical components and rides back and forth during the scan. A locking slider holds it in place during shipment. You have to unlock the scanner before you switch on the scanner.

1. Place the scanner on a horizontal, flat surface and pull it forwards until you can see the locking slider at the base.
2. Slide the locking slider to the right.

   Your scanner is unlocked.



3. Move the scanner back on your desktop. Allow a minimum of 10 cm (4 inches) free space around each side of the scanner .

Locking the scanner

If you have to move the scanner over long distances, you should first lock the scanner. This will protect the scanner's optical carriage from possible damage.

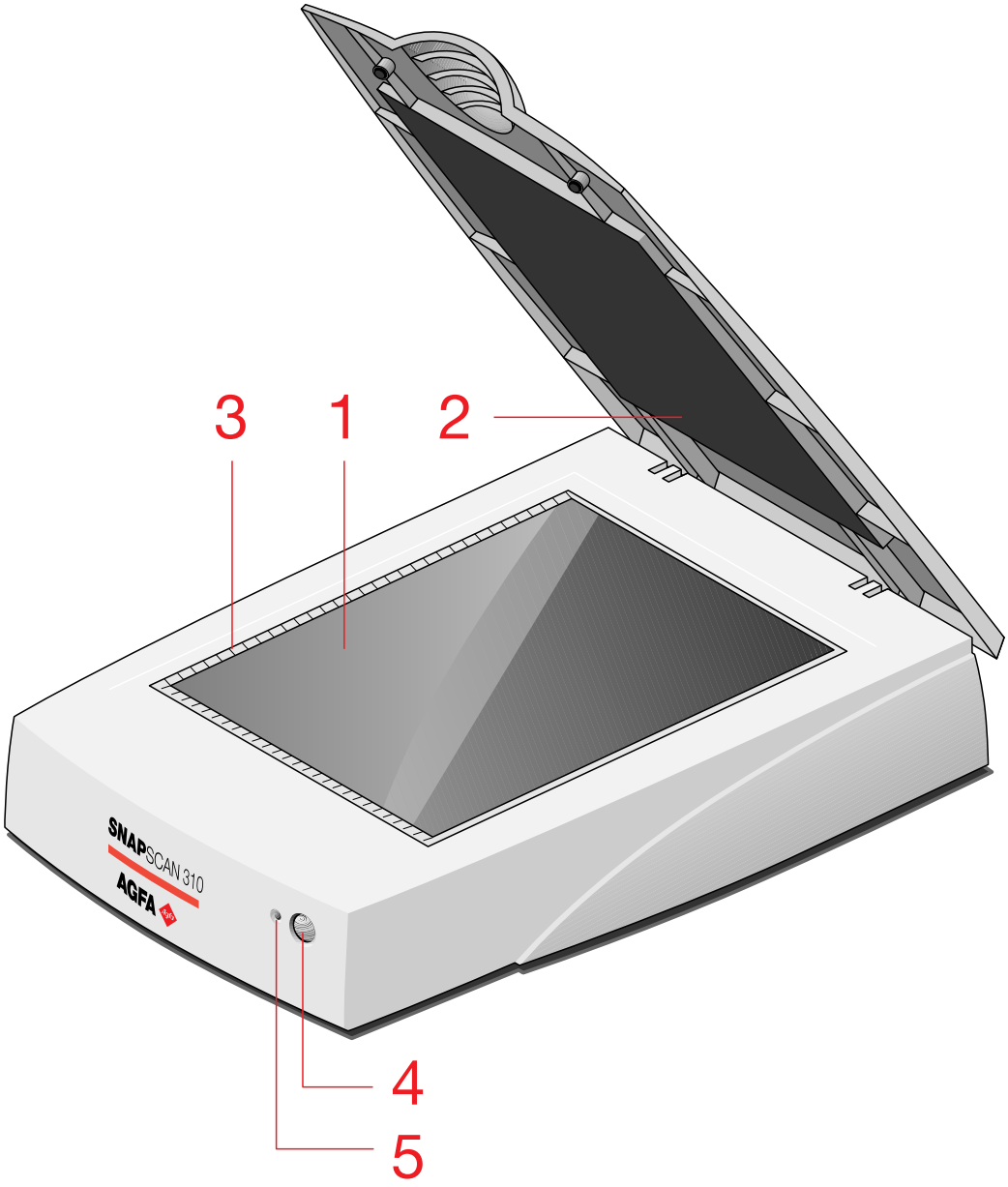
1. Place the scanner on a horizontal, flat surface and pull it forwards until you can see the locking slider on the underside.
2. Turn on your scanner.

   The scanner's optical assembly moves to its home position.
3. When the status indicator stops blinking, push the locking slider to the left.

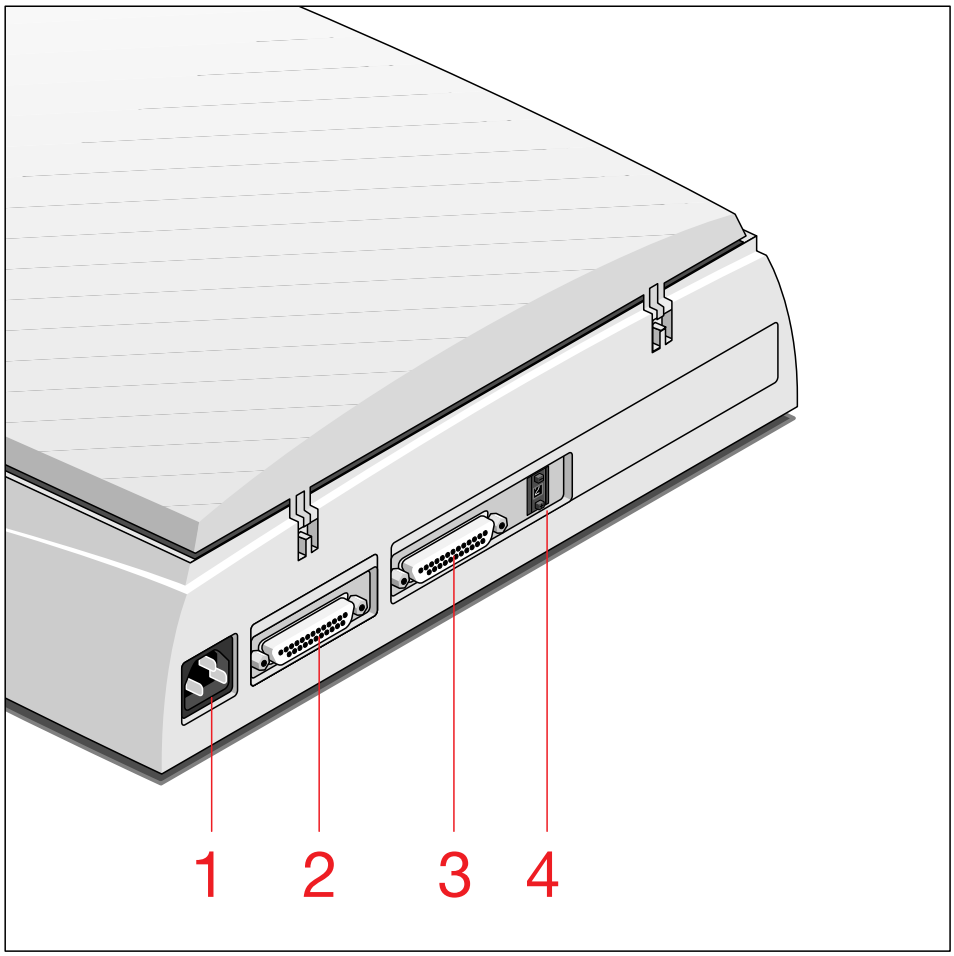
   Your scanner is locked.
4. Switch off your scanner.

Taking a closer look

Now that you have the scanner out of the box, take a closer look so that you become familiar with its parts. The figures illustrate the locations of the different parts of your SnapScan.



1. glass plate
2. adjustable document cover
3. rulers
4. power indicator / status indicator
5. power switch



1. power connector
2. 25-pin SCSI interface connector
3. 25-pin SCSI interface connector
4. SCSI-ID switch

Performing a power-on test

You are now ready to perform a power-on test to check if the scanner is operating correctly.

1. Check whether you have unlocked the scanner.
2. Connect the power cord to the scanner.

   Make sure that you are using the correct power cord for the voltage in your area. If it does not correspond, call your dealer.
3. Switch on the scanner.

   The scanner performs a self-test during which the status indicator blinks slowly. This takes about 15 seconds. After the self-test the status indicator remains on.

   If a malfunction is detected during the self-test, that is, if the status indicator starts blinking at a higher frequency, refer to Appendix A — Troubleshooting.

Chapter 2 — Installing the scanner for the Macintosh computer

This chapter shows you how to set up your SnapScan with your Macintosh computer.

Hardware requirements

Installation of the scanner hardware

- Choosing a SCSI ID number
- Connecting the scanner
- Testing the connection

Electronic registration

Installation of the software

Placing reflective originals

Hardware requirements

- A 68020 processor.
- A 14 inch color monitor with thousands of colors for an accurate display of color images.
- 12 MB of RAM (16 MB is recommended)
- A high-capacity disk drive.
- A CD-ROM drive.
- System 7.1™ or higher.
- The amount of disk space available on your computer determines the number and the size of the images you can scan. Make sure you have enough free storage space on your hard disk. You need about two times the size of the image to scan, edit and save it. You need minimum 20 MB free hard disk space.

Installation of the scanner hardware

This section shows you how to set up your SnapScan with your Macintosh computer. First you choose and set a SCSI ID number, then you connect the scanner to your computer, and finally you test the connection.

Choosing a SCSI ID number

Before you connect your SnapScan to your computer, you have to find out which SCSI ID numbers are already assigned and which numbers are free. To do this, you can use the Macintosh utility 'SCSI ID Checker'. You will find this utility in the FotoLook™ or FotoSnap™ folder at the top level of your start-up disk after you installed the software. You will find the instructions for installation of the software further in this guide.

1. Make sure that your scanner is disconnected.
2. Check at the rear of the scanner if the SCSI ID number is set to number 2. If not, set it to number 2 (see Setting the scanner to a SCSI ID number).
3. Open the SCSI ID Checker.

   A dialog box appears with a list of the SCSI ID numbers.

   Your Macintosh always occupies ID 7. Its internal hard disk usually occupies ID 0 or ID 1. The CD ROM usually occupies ID 3. If your Macintosh is equipped with 2 SCSI-busses, the button Next Bus allows you to switch busses.

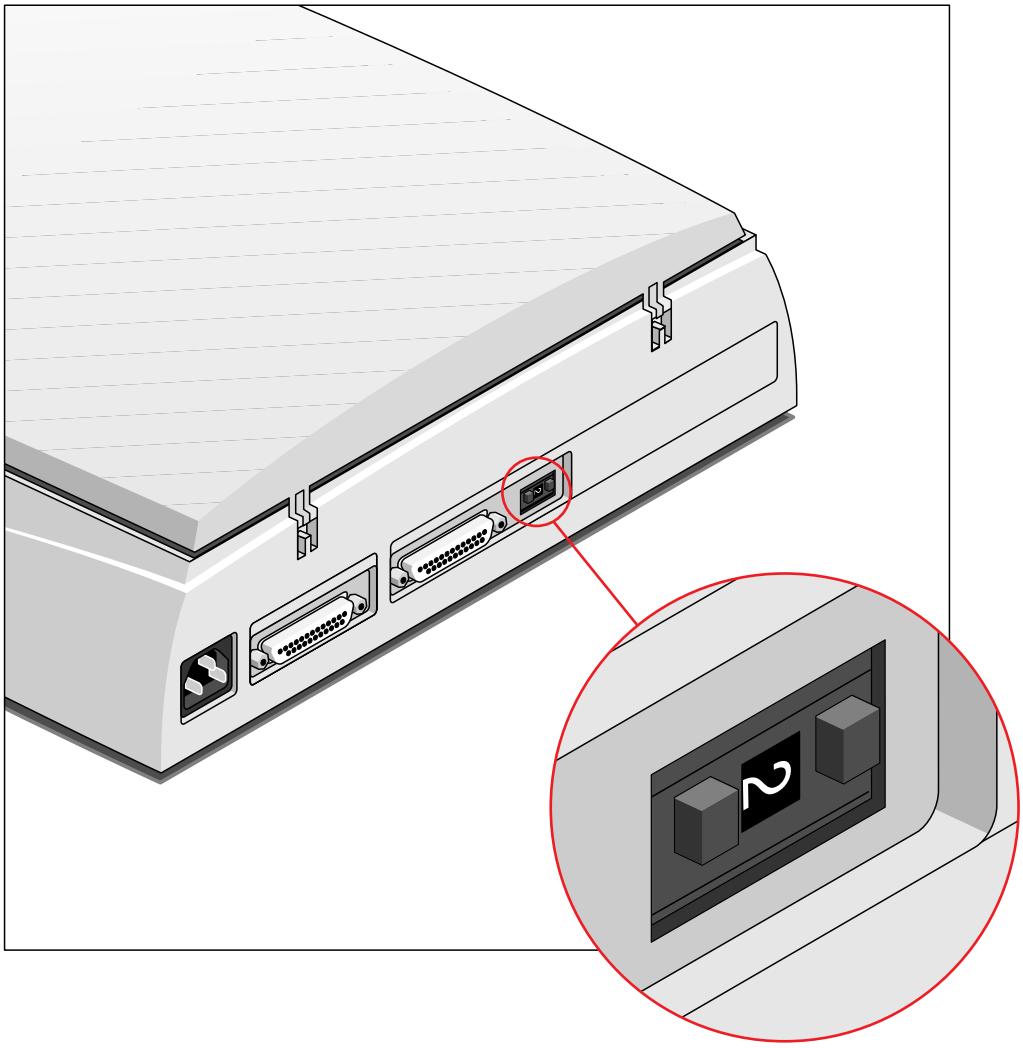
4. Check in the SCSI ID table if SCSI ID number 2 is free.

   If SCSI ID number 2 is already assigned, you need to set the scanner to a free SCSI ID number (see Setting the scanner to a SCSI ID number).

5. Click OK to close the SCSI ID Checker.

Setting the scanner to a SCSI ID number

1. Make sure your scanner is switched off and is disconnected from your computer.
2. Choose an unassigned SCSI ID number.
3. Push the button above or underneath the SCSI ID number at the rear of the scanner until you see the number you want.



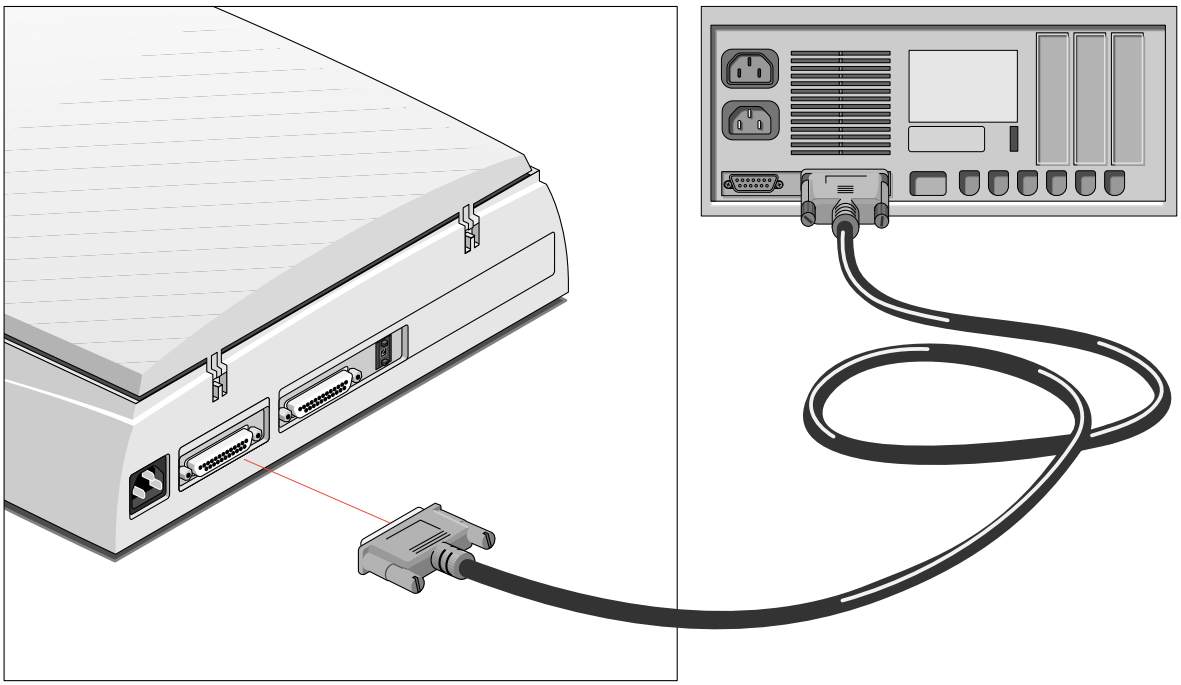
Connecting the scanner

A SCSI cable is supplied with your scanner.

Caution: For safety reasons, never use extension cables for power cords. Always make sure there is only one terminator in your SCSI chain. You put the device with the terminator at the end of your SCSI chain. Some SCSI devices, such as the external hard disk, have built-in terminators and must therefore be placed at the end of your SCSI chain. Check the documentation of each of your SCSI devices if you are not sure whether the device has a built-in terminator. The last device of your chain has to be terminated. Your SnapScan has no built-in terminator. (For more information see SCSI devices.)

If your SnapScan is the only SCSI device to be connected to your computer

1. Switch off your scanner and disconnect the power cord.
2. Switch off your computer and disconnect the power cord.
3. Connect one 25-pin end of the SCSI cable to the connector on your computer.
4. Connect the other 25-pin end of the SCSI cable to the connector on your scanner.



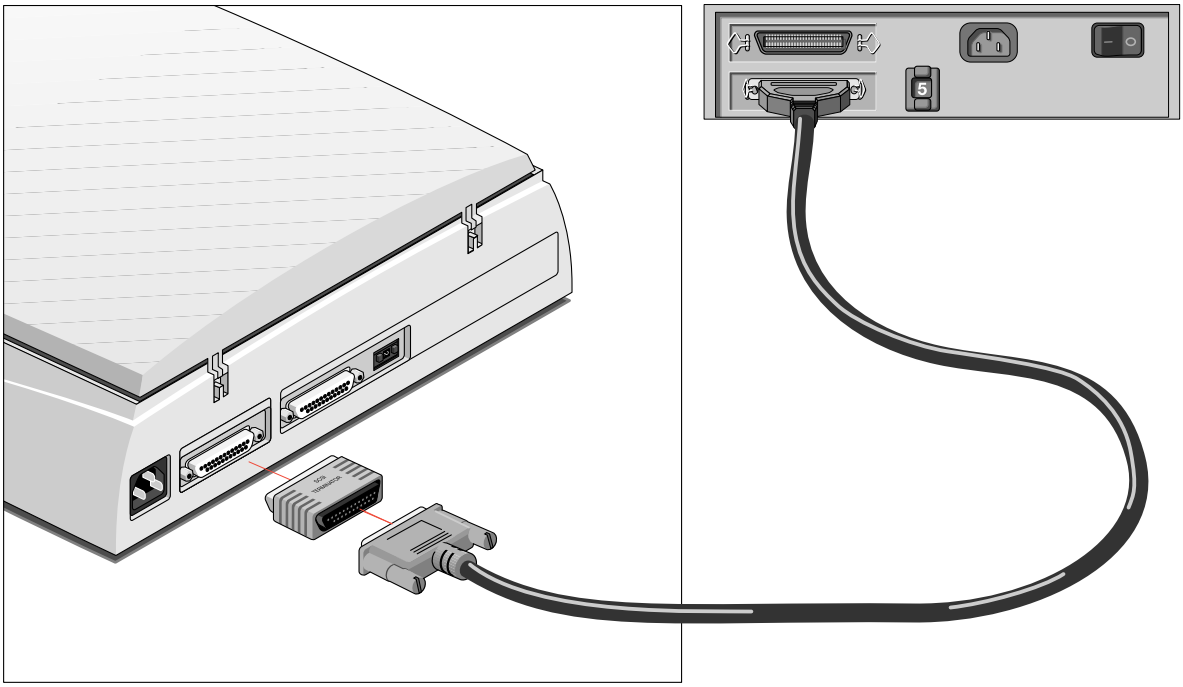
If you use another SCSI cable than the one provided with your scanner, you have to put a terminator between the connector of your scanner and the SCSI cable.

5. Snap the diamond shaped wire clips into the clip brackets to secure the connection.

❖ Note: In case of problems, refer to Appendix A — Troubleshooting.

If your SnapScan will be connected to your computer together with other SCSI devices

- If you install the scanner at the end of your SCSI chain.

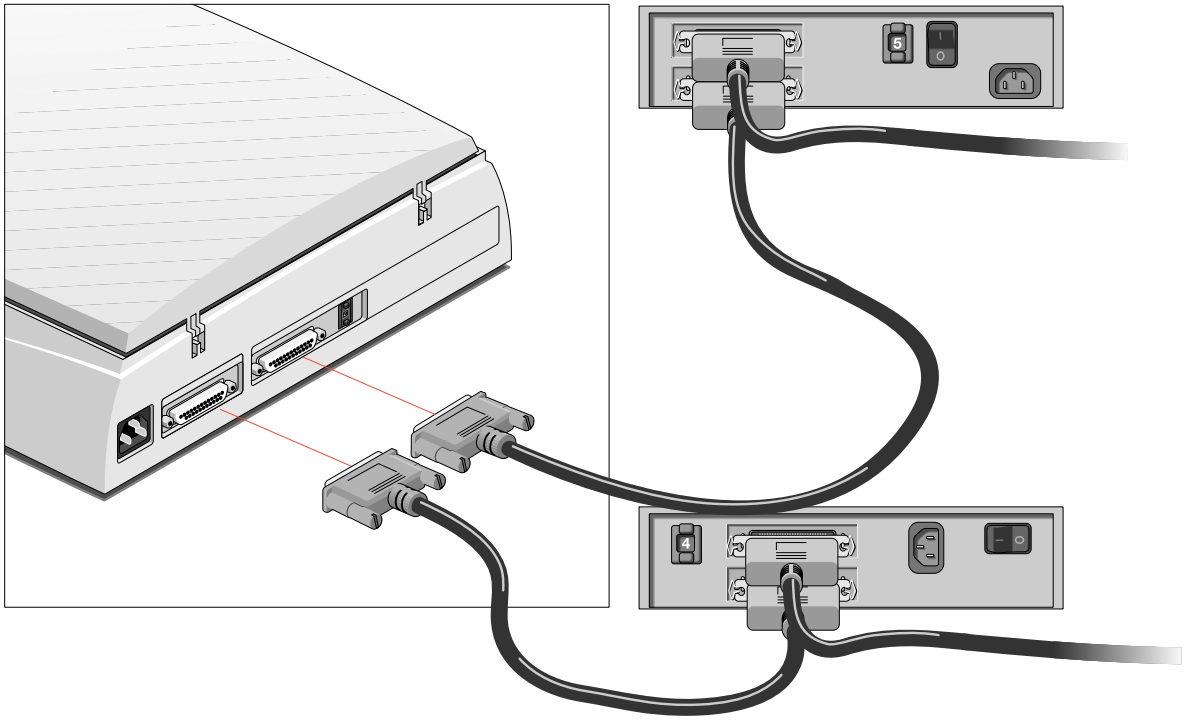


1. Remove the terminator from the last device in the SCSI chain.
2. Connect one 25-pin end of the SCSI cable to the connector that has become available on this device.
3. Place a terminator on the free 25-pin connector of the scanner.
4. Connect the other 25-pin end of the SCSI cable to the other free 25-pin connector of the scanner.
5. Snap the diamond shaped wire clips into the clip brackets to secure the connection.

❖ Note: In case of problems, refer to Appendix A — Troubleshooting.

■ If you install the scanner between two other devices:

Caution: Do not connect a terminator directly to the scanner in this configuration.



1. Disconnect your SCSI cable from one of these two devices.
2. Connect the free end of this SCSI cable to the scanner.
3. Connect one 25-pin end of the SCSI cable (the one supplied with your scanner) to the other adjacent SCSI device.
4. Connect the other 25-pin end of the SCSI cable (the one supplied with your scanner) to the scanner.
5. Snap the diamond shaped wire clips into the clip brackets to secure the connection.
6. Make sure that the last device in the chain is terminated.

❖ Note: In case of problems, refer to Appendix A — Troubleshooting.

Testing the connection

You are now ready to perform a test to check if the scanner is correctly connected to your Macintosh computer.

Caution: Make sure the scanner is unlocked.

1. Connect the power cord to the scanner.

   Use the correct power cord for the voltage in your area. SnapScan automatically adjusts to any AC electrical outlet rated from 100V to 240V.

2. Check if the SCSI cable is properly connected.

3. Switch on your scanner.

   The scanner performs a self-test during which the status indicator blinks slowly. This takes about 15 seconds or less. After the self-test the status indicator remains on.

   If a malfunction is detected during the self-test, that is, if the status indicator starts blinking at a higher frequency, refer to Appendix A — Troubleshooting.

4. Switch on any other SCSI devices you may have attached, and wait for them to start up.

5. Switch on your Macintosh.

   As your Macintosh computer starts up, it performs a series of tests to verify the correct system configuration.

6. Open the SCSI ID checker. For more information see Choosing a SCSI ID number.

7. Verify whether the computer sees the scanner at its proper SCSI ID.

   In case of problems, refer to Appendix A — Troubleshooting.

8. Close the SCSI ID checker.

Electronic registration

Use the electronic registration on the Agfa Scanners CD-ROM. You will be asked to register when you install the software that came with your scanner. You will find the product serial number at the rear of your scanner.

1. Insert the Agfa scanners CD ROM in your CD ROM drive.

   Your computer automatically scans the CD and opens the AGFA scanners window.

2. Click your language: English.

   You will be asked if you want to install Acrobat™. You need Acrobat to read your documentation.

3. Click SnapScan.
4. Click Install software.
5. Click Register.
6. Follow the instructions on your screen.

Installing the software

1. Disable the virus protection software. You can turn it off in the Extensions Manager Control Panel or you can drag the software out of the System Folder.

   ❖ Note: After installing, enable the virus protection software again.

2. Restart your computer.
3. Insert the Agfa Scanners CD-ROM in the CD-ROM drive of your Macintosh computer.
4. Double-click the installer Icon to start the program.
5. Make your choice in every successive screen.

   Install Adobe™ Acrobat Reader (to read the documentation), FotoSnap (the easy-to-use scanner driver), and FotoLook (the professional scanner driver).

6. Remove the Agfa Scanners CD-ROM.
7. Insert the Software Collection CD-ROM.
8. Double-click the installer Icon to start the program.
9. Make your choice in every successive screen.

   Install ColorIt!™ (the image editing software).

For the latest up-to-date information, refer to the Read Me files that will be installed on your computer.

To install any additional software that came with your scanner, follow the instructions of the manufacturer.

Placing reflective originals

You can place a reflective (photographic) original directly on the scanner's glass plate.

The following steps explain how to position your reflective original on your scanner.

1. Raise the document cover of the scanner.
2. Place the original face down on the glass plate with the top side against the middle of the front ruler.

   The optical performance of a CCD scanner is always best near the middle of the glass plate.

   If you put more than one original on the glass plate, position them as close to the center line as possible to optimize quality.

3. Lower the document cover of the scanner.

   The adjustable document cover makes it possible to scan from books and magazines. When you put a thicker original on the reflective glass plate, the document cover adapts to its thickness.

Chapter 3 — Installing the scanner for the PC

This chapter shows you how to set up your SnapScan with your PC.

Hardware requirements

Installation of te scanner hardware

- Installation with the Agfa supplied SCSI card
- Installation if your PC already has a SCSI card
- Testing the connection

Electronic registration

Installing the software

Placing reflective originals

Hardware requirements

- A 486 processor.
- A 14 inch color monitor.
- A 16-bit video card for an accurate display of color images.(minimum 256 colors / High Color (16bit) is recommended)
- 12 MB of RAM. (16 MB of RAM is recommended).
- FotoLook and FotoSnap are compatible with all IBM™ PC's and compatibles capable of running MS Windows 3.1™, Windows 95™, Windows NT™ 3.51 or 4.0 for Intel® platforms.
- An ASPI compatible SCSI card.You can use the SCSI interface card that is delivered with your SnapScan (See Installing the SCSI interface card) or you can use your own SCSI interface card if you have one. In general, FotoLook supports all fully WINASPI compatible cards. Some SCSI cards require a special SCSI cable (e.g. wide SCSI). Contact your supplier for the proper cable.

  If you do not use the SCSI interface card that is supplied with your SnapScan, you should look at your PC's documentation about installing SCSI interface cards. Check the installation and set-up guidelines in the documentation that is supplied together with your SCSI interface card.
- A CD-ROM drive.
- The amount of disk space available on your PC determines the number and the size of the images you can scan. Make sure you have enough free storage space on your hard disk. You need about two times the size of the image to scan, edit and save it. You need a minimum of 30 MB free hard disk space.

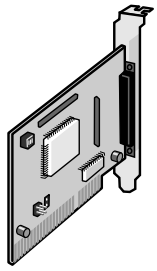
Installation of the hardware

This section shows you how to set up your SnapScan with your PC. You can find information on the SCSI interface card, instructions for connecting the scanner to your PC and instructions for testing the connection.

Installation with the Agfa supplied SCSI card

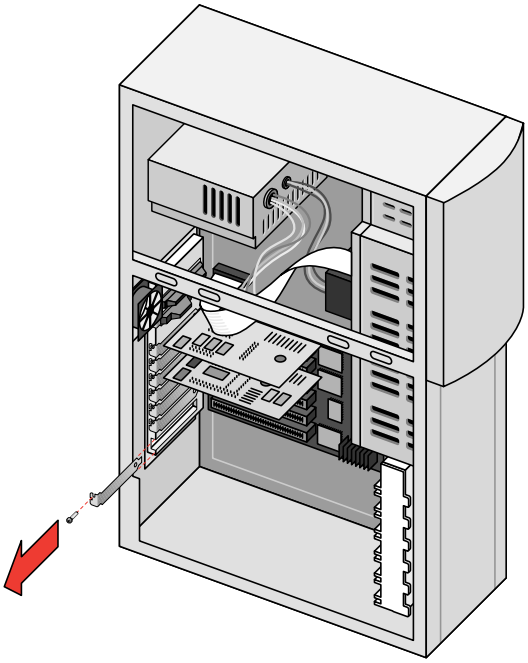
Installing the SCSI interface card

SnapScan requires a SCSI interface card to work with your 486 (or higher) or compatible computer.



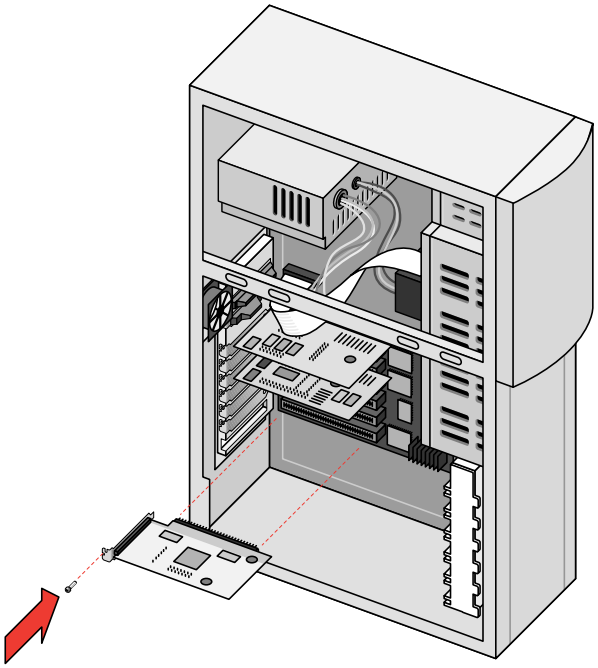
- Note: We assume that you have no other SCSI devices installed and that you use the card and cable that are supplied by Agfa.

1. Switch off your computer and disconnect the power cord.
2. Remove the cover of your computer.
3. Find a free 16-bit ISA expansion slot.
   - Note: For more information, refer to your computer manual.
4. Remove the corresponding slot cover from the back of the computer chassis. Keep the screw that held the cover in place.



5. Touch some metal part of the computer and then remove the SCSI card from its antistatic bag, holding it by its metal support bracket. Static electricity can damage your card.
6. Position the SCSI card in the expansion slot and press down firmly.

   Make sure the card is inserted completely. You can feel it snap into place.

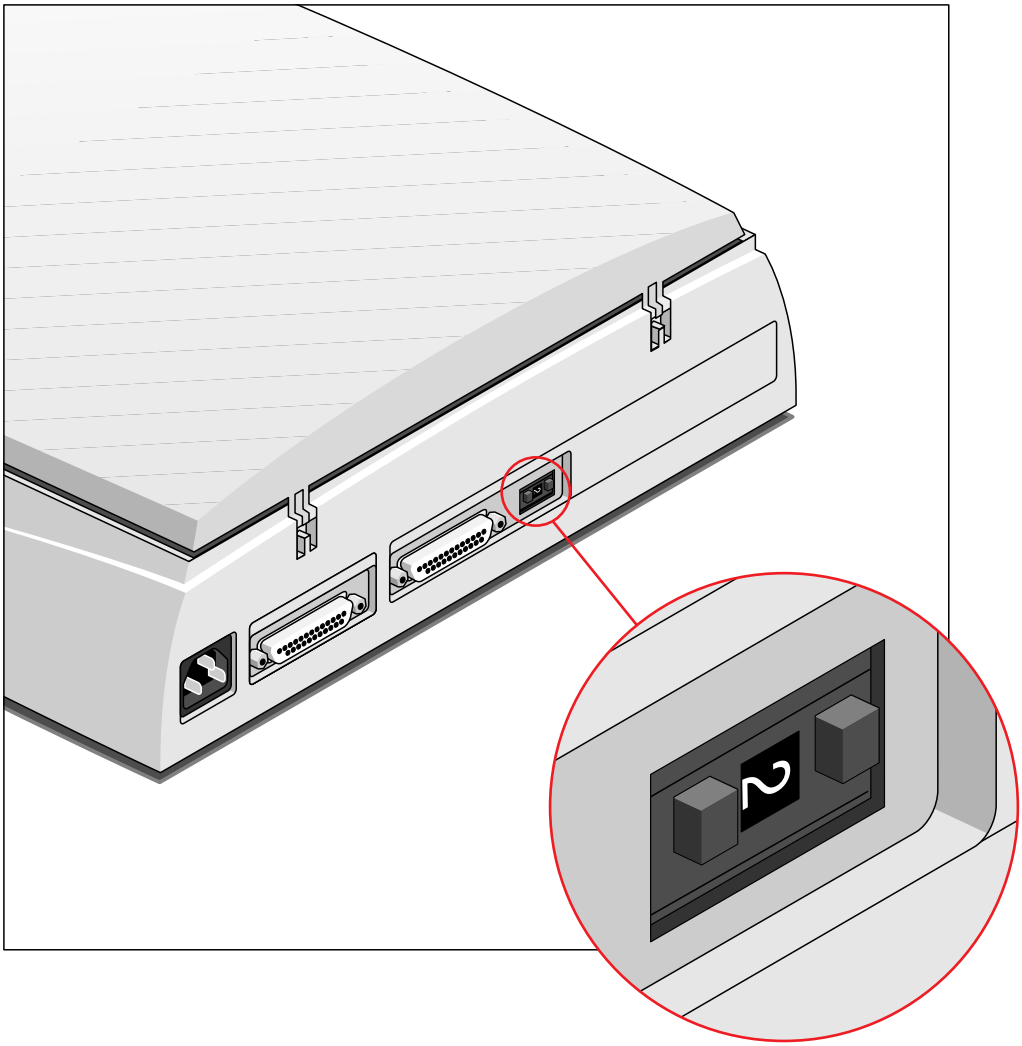


7. Secure the card with the screw that you removed in step 4.
8. Put back the cover of the PC.

Choosing a SCSI ID number

1. Make sure your scanner is disconnected.
2. Check at the rear of the scanner if the SCSI number it is set to SCSI ID number 2. If it is not, set it to SCSI ID number 2.

   Push the button above or underneath the SCSI number at the rear of your scanner.



Connecting the Scanner

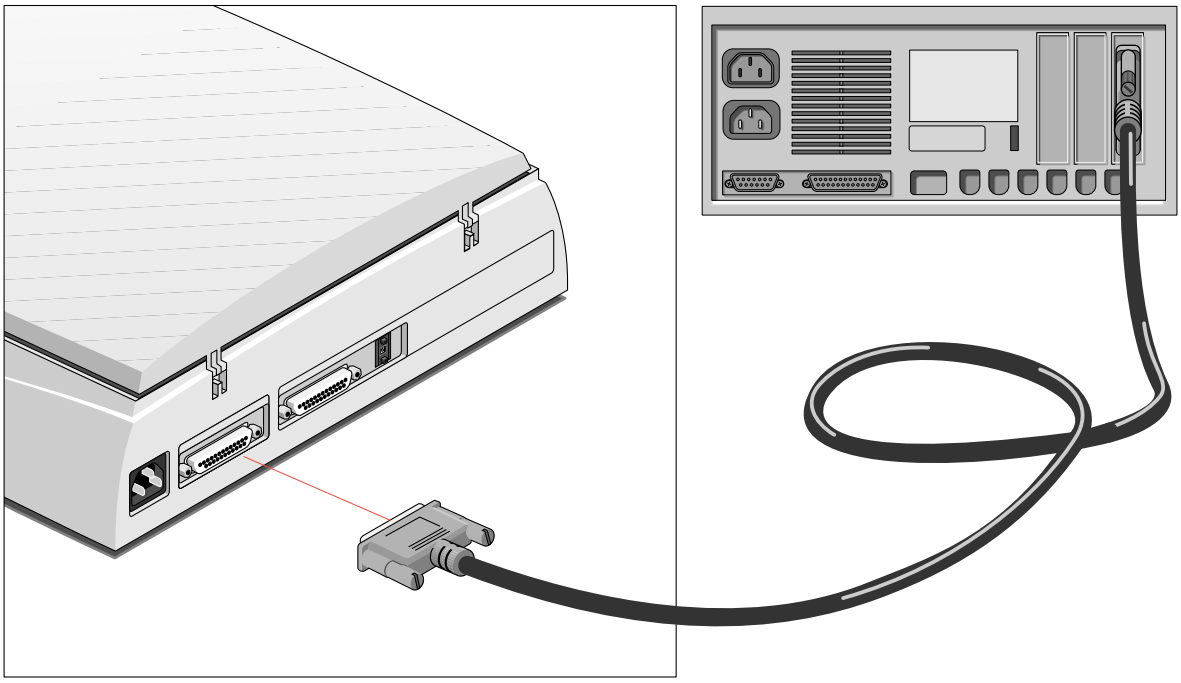
Caution: For safety reasons, never use extension cables for power cables. Never try to connect the scanner to the serial or parallel port of your PC: you might seriously damage your equipment if you do.

1. Switch off your computer and disconnect the power cord.

2. Plug one 25-pin connector of the SCSI cable into the SCSI card connector of your computer.

   A SCSI cable is supplied with your scanner.

3. Plug the other 25-pin connector of the SCSI cable to the SCSI connector at the rear of the scanner.



4. Connect the power cord to the computer.
5. Connect the power cord to the scanner.

- If you are using another SCSI cable than the one supplied with your scanner, use a terminator between the connector of the SCSI cable and the connector of your scanner.

Installation if your PC already has a SCSI interface card

Choosing a SCSI ID number

Before you connect your SnapScan to your PC, you have to find out which SCSI ID numbers are already assigned and which numbers are free.

1. Make sure that your scanner is disconnected.
2. Check at the rear of the scanner if the SCSI ID number is set to number 2.

- If it is not, set it to number 2.

If you want to install EZ-SCSI™, the SCSI ID checker software, follow the instructions.

If you already have software installed to check which SCSI ID numbers are free, go to step 10.

3. Insert the Agfa Scanners CD-ROM into your CD-ROM drive.

   Windows 95 should detect the CD-ROM and then automatically run the installation program.

   If Windows 95 does not run the program, first double-click the CD-ROM icon in 'My Computer' and then double-click **agfascan.exe**. If you have Windows 3.11. Open the Program Manager and from the File menu choose Run. Then type **d:\agfascan.exe** and press <Enter>. If your CD-ROM drive is not using the drive letter "d", replace "d" by the drive letter of your CD-ROM.

4. Go to the screen "Choose your action".
5. Choose Install software.
6. Choose Agree and Install.
7. Choose EZ-SCSI.
8. Follow the instructions on the screen.
9. Close the installation program
10. Open the SCSI interrogator.

    A dialog box appears with a list of the SCSI ID numbers that are free in your PC.

    Your PC SCSI card mostly occupies ID 7. If your PC is equipped with 2 SCSI-busses, the Adapter menu allows you to switch busses. Choose the appropriate bus.

11. Check if SCSI ID 2 is free.

    Your SnapScan is preset to ID 2.

- If SCSI ID number 2 is free, close the SCSI interrogator.
- If SCSI ID number 2 is already assigned, you need to set the scanner to a free SCSI ID number.

Connecting the scanner

Before you connect the scanner to your PC, make sure that your scanner as well as your PC are switched off.

A SCSI cable is supplied with your scanner.

❖ Note: If the cable does not fit, contact your dealer.

Caution: For safety reasons, never use extension cables for power cables.
Always make sure there are no more than two terminators in your SCSI chain, one at the beginning and one at the end. Some SCSI devices, such as an external hard disk, have built-in terminators and must therefore be placed at the end of your SCSI chain. Please check the documentation of each of your SCSI devices if you are not sure whether the device has a built-in terminator. The last device in your chain has to be terminated. Your SnapScan has no built-in terminator. For more information about SCSI devices see earlier in this chapter: SCSI devices
Never try to connect the scanner to the serial or parallel port of your PC: you might seriously damage your equipment if you do.

If your SnapScan is the only SCSI device to be connected to your computer:

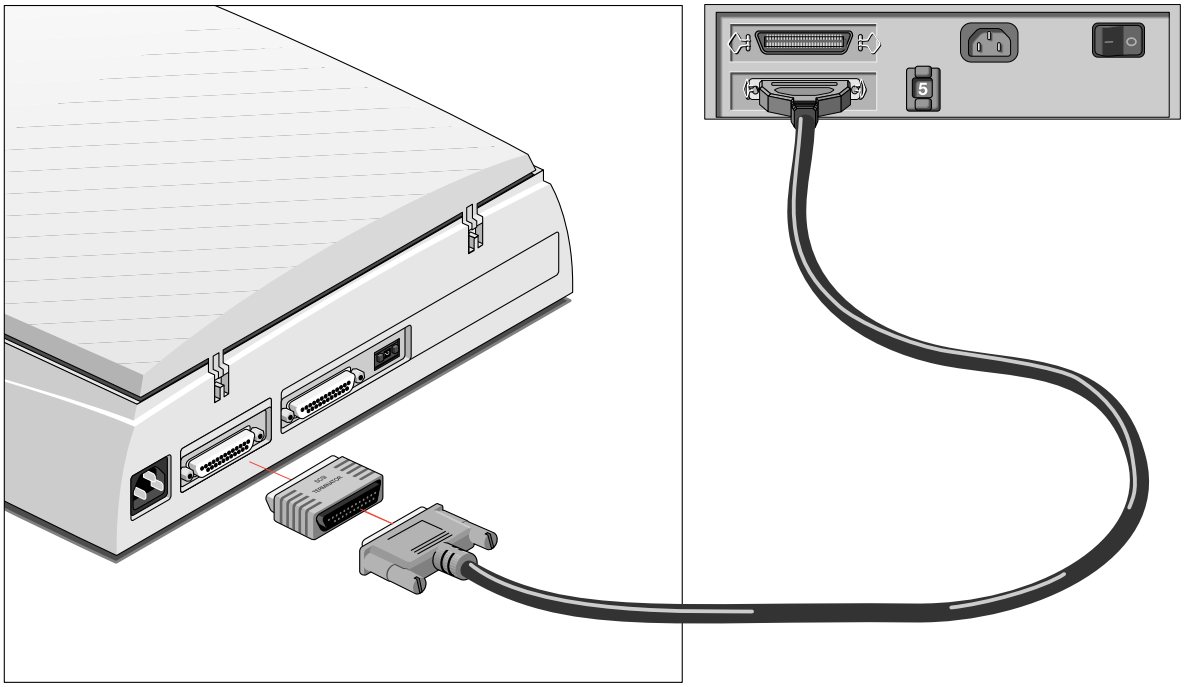
1. Switch off your scanner and disconnect the power cord.
2. Switch off your computer and disconnect the power cord.
3. Connect one 25-pin end of the SCSI cable to the connector on your computer.
4. Connect the other 25-pin end of the SCSI cable to the connector on your scanner.

   You have to put a terminator between the connector of your scanner and the SCSI cable.
5. Snap the diamond shaped wire clips into the clip brackets to secure the connection.

In case of problems, refer to Appendix A — Troubleshooting.

If your SnapScan will be connected to your computer together with other SCSI devices:

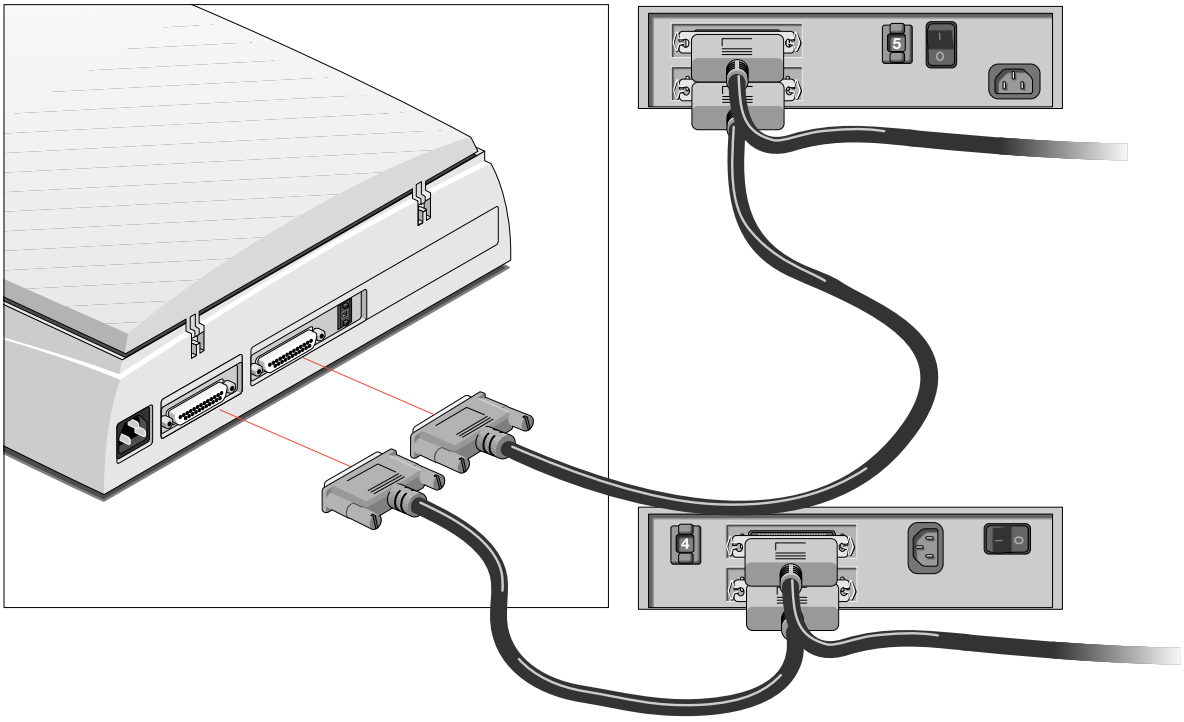
- If you install the scanner at the end of your SCSI chain:



1. Remove the terminator from the last device in the SCSI chain.
2. Connect one 25-pin end of the SCSI cable to the connector that has become available on this device.
3. Put a terminator on a 25-pin connector of the scanner.
4. Connect the other 25-pin end of the SCSI cable to the other free 25-pin connector of the scanner.
5. Snap the diamond shaped wire clips into the clip brackets to secure the connection.

In case of problems, refer to Appendix A — Troubleshooting.

- If you install the scanner between two other devices:



1. Disconnect your SCSI cable from one of these two devices.
2. Connect the free end of this SCSI cable to the scanner.
3. Connect one 25-pin end of the SCSI cable (the one supplied with your scanner) to the other adjacent SCSI device.
4. Connect the other 25-pin end of the SCSI cable (the one supplied with your scanner) to the scanner.
5. Snap the diamond shaped wire clips into the clip brackets to secure the connection.
6. Make sure that the last device in the chain is terminated.

Caution: Do not connect a terminator directly to the scanner in this configuration.

In case of problems, refer to Appendix A — Troubleshooting.

Testing the connection

You are now ready to perform a test to check if the scanner is correctly connected to your PC.

Caution: Check if the scanner is properly unlocked.

1. Connect the power cord to the scanner.

   Use the correct power cord for the voltage in your area. SnapScan automatically adjusts to any AC electrical outlet rated from 100V to 240V.

2. Check if the SCSI cable is properly connected.

3. Switch on the scanner.

   The scanner performs a self-test during which the status indicator blinks slowly. This takes about 15 seconds or less. After the self-test the status indicator remains on.

   If a malfunction is detected during the self-test, that is, if the status indicator starts blinking at a higher frequency, refer to Appendix A — Troubleshooting.

4. Switch on any other SCSI devices you may have attached, and wait for them to start up.

5. Switch on your PC.

6. Check in the Adaptec™ SCSI interrogator if the SCSI interface card sees the scanner at the right SCSI ID. You will find the SCSI interrogator after installing the software EZ-SCSI. For more information see Choosing a SCSI ID in the computer.

Electronic registration

Use the electronic registration on the Agfa Scanners CD-ROM. You will be asked to register when you install the software that came with your scanner. You will find the product serial number at the rear of your scanner.

1. Insert the Agfa scanners CD ROM in your CD ROM drive.

   Your computer automatically scans the CD and opens the AGFA scanners window.

   Windows should detect the CD-ROM and then automatically run the installation program. If it does not run the program, first double-click the CD-ROM icon in 'My Computer' and then double-click **agfascan.exe**.

   If you are a Windows 3.xx or a Windows NT 3.51 user. Open the Program Manager. From the File menu choose Run and then Type **d:\agfascan.exe** and press <Enter>. If your CD-ROM drive is not using the drive letter "d", replace "d" by the drive letter of your CD-ROM.

2. Click your language: English.

   You will be asked if you want to install Acrobat. You need Acrobat to read your documentation.

3. Click SnapScan.
4. Click Install software.
5. Click Register.
6. Follow the instructions on your screen.

Installing the software

Windows 95

Installing the SCSI driver

1. Turn on your scanner and your computer.

   Windows 95 will automatically detect the new hardware.

2. Follow the instructions on the screen.

   Windows 95 will ask you to insert the Windows 95 CD-ROM or diskettes to install the driver for your SCSI card. It will also ask you to install the driver for your scanner.

3. Select 'Driver from disk provided by hardware manufacturer' and click OK.
4. Insert the Agfa Scanners CD-ROM into your CD-ROM drive.
5. Click Browse.

6. Select the file agfascan.inf on the CD-ROM and click OK.

   The installation of the SCSI driver is finished.

7. Remove the CD-ROM from the CD-ROM drive.

Installing the software

1. Insert the Software Collection CD-ROM in your CD-ROM drive.

   Windows should detect the CD-ROM and then automatically run the installation program. If it does not run the program, first double-click the CD-ROM icon in 'My Computer' and then double-click **softcol.exe**.

2. Follow the instructions on the screen.

3. Install iPhoto Express (the image editing software).

4. Remove the CD-ROM from your CD-ROM drive.

5. Insert the Agfa Scanners CD-ROM into your CD-ROM drive.

   Windows should detect the CD-ROM and then automatically run the installation program. If it does not run the program, first double-click the CD-ROM icon in 'My Computer' and then double-click **agfascan.exe**.

6. Follow the instructions on the screen.

   Install Adobe Acrobat Reader (to read the documentation), FotoSnap (the easy-to-use scanner driver), and FotoLook (the professional scanner driver).

7. Close the installer program.

   The installation of the software is finished.

8. Remove the CD-ROM from the CD-ROM drive.

For the latest up-to-date information, refer to the FotoLook Read Me files.

Installing additional software

To install any additional software that came with your scanner, follow the instructions of the manufacturer.

Windows 3.11

Installing the SCSI driver and the software

1. Switch on your scanner and your computer.
2. Insert the Software Collection CD-ROM in your CD-ROM drive.
3. Open the Program Manager.
4. From the File menu choose Run.
5. Type **d:\softcol.exe** and press <Enter>.

   If your CD-ROM drive is not using the drive letter “d”, replace “d” by the drive letter of your CD-ROM.
6. Follow the instructions on the screen and Install iPhoto Plus.
7. Remove the CD-ROM from your CD-ROM drive.
8. Insert the Agfa Scanners CD-ROM into your CD-ROM drive.
9. Open the Program Manager.
10. From the File menu choose Run.
11. Type **d:\agfascan.exe** and press <Enter>.

    If your CD-ROM drive is not using the drive letter “d”, replace “d” by the drive letter of your CD-ROM.
12. Follow the instructions on the screen.

Caution: Make sure to install EZ-SCSI, the driver for your SCSI card.

Install Adobe Acrobat Reader (to read the documentation), FotoSnap (the easy-to-use scanner driver), and FotoLook (the professional scanner driver).

13. Close the installer program.

    The installation of the software is finished.
14. Remove the CD-ROM from the CD-ROM drive.

For the latest up-to-date information, refer to the FotoLook Read Me files.

Installing additional software

To install any additional software that came with your scanner, follow the instructions of the manufacturer.

Windows NT version 3.51

Installing the SCSI driver

1. Switch on your scanner and your computer.
2. Open Program Manager.
3. Open Main.
4. Open Windows NT Setup.

   The Windows NT Setup dialog box appears.
5. From the Options menu, choose 'Add SCSI controller'.

   The SCSI Adapter Setup dialog box appears.
6. Click Add.

   The Select SCSI Adapter Option dialog box appears.
7. Select the 'Adaptec AHA 151x' adapter from the drop-down list and click Install.

   The installation of the driver is finished. Your computer will restart.

Installing the software

1. Insert the Software Collection CD-ROM in your CD-ROM drive.
2. Open the Program Manager.
3. From the File menu choose Run.
4. Type **d:\softcol.exe** and press <Enter>.

   If your CD-ROM drive is not using the drive letter "d", replace "d" by the drive letter of your CD-ROM.
5. Follow the instructions on the screen and install iPhoto Express (the image editing software).
6. Remove the CD-ROM from your CD-ROM drive.
7. Insert the Agfa Scanner CD-ROM into your CD-ROM drive.
8. Open the Program Manager.
9. From the File menu choose Run.
10. Type **d:\agfascan.exe** and press <Enter>.

    If your CD-ROM drive is not using the drive letter "d", replace "d" by the drive letter of your CD-ROM.
11. Follow the instructions on the screen.

Caution: Do not install EZ-SCSI!

Install Adobe Acrobat Reader (to read the documentation), FotoSnap (the easy-to-use scanner driver), and FotoLook (the professional scanner driver).

12. Close the installer program.

    The installation of the software is finished.

13. Remove the CD-ROM from the CD-ROM drive.

For the latest up-to-date information, refer to the FotoLook Read Me files.

Installing additional software

To install any additional software that came with your scanner, follow the instructions of the manufacturer.

Windows NT version 4.0

Installing the SCSI driver

1. Switch on your scanner and your computer.
2. Open the Control Panel.
3. Open SCSI Adapters.

   The SCSI Adapters dialog box appears.

4. Select the Drivers page and click Add.

   The Install Driver dialog box appears.

5. Select Adaptec in the Manufacturers list and 'Adaptec AHA 151x' in the SCSI Adapter list.
6. Click OK.

   The installation of the drivers is finished. Your computer will restart.

Installing the software

1. Insert the Software Collection CD-ROM in your CD-ROM drive.

   Windows should detect the CD and then automatically run the installation program. If it does not run the program, first double-click the CD-ROM icon in 'My Computer' and then double-click **softcol.exe**.

2. Follow the instructions on the screen and install iPhoto Express (the image editing software).
3. Remove the CD-ROM from your CD-ROM drive.
4. Insert the Agfa Scanners CD-ROM into your CD-ROM drive.

   The CD-ROM will start up automatically. If it does not start up, first double-click the CD-ROM icon in 'My Computer' and then double-click **agfascan.exe**.

5. Follow the instructions on the screen.

Caution: Do not install EZ-SCSI!

Install Adobe Acrobat Reader (to read the documentation), FotoSnap (the easy-to-use scanner driver), and FotoLook (the professional scanner driver).

6. Close the installer program.

   The installation of the software is finished.

7. Remove the CD-ROM from the CD-ROM drive.

❖ Note: For the latest up-to-date information, refer to the FotoLook Read Me files.

Installing additional software

To install any additional software that came with your scanner, follow the instructions of the manufacturer.

Caution: Agfa cannot be held responsible for any changes made in the operating systems.

Placing reflective originals

See Placing reflective originals.

Appendix A — Troubleshooting

This appendix gives solutions for some common problems you may come across when starting up or using your SnapScan.

The computer screen displays scanner calibration error.

- The calibration slit is covered by your transparent original. You did not use the template or you used it incorrectly. This can only happen when you are in transparency mode.

The scanner lamp flickers, dims, or fails to come on.

- The cold cathode lamp needs to be changed. Contact your dealer.

The scanner driver software returns a "Scanner not ready" or similar message.

- Verify the power connection to the scanner
- Check that the power switch is turned on.
- Check the Installation procedure, to see if you followed the instructions. Pay special attention to the setting of the SCSI ID number.
- Verify the terminators and the cables. If there is a problem with a cable or with the SCSI board of the scanner, contact your dealer.
- Disconnect all SCSI devices and connect them one by one, beginning with the scanner, to identify the device that causes the problem.

The scanner does not start up.

- Contact your dealer.

The scanner makes an unusual noise and nothing moves under the glass plate when you switch the scanner on.

- The scanner was not properly unlocked. Immediately switch off the scanner and unlock it properly, or contact your dealer.

The status indicator on the scanner's operating panel starts blinking at a higher frequency after the power-up sequence (= 15 seconds).

A malfunction has been detected by the scanner.

- Check if you have unlocked the scanner.
- Switch off the scanner and switch it back on.
- If this does not help, please contact your dealer.

The power indicator / status indicator fails to light up.

- Verify the power connection to the scanner.
- Check if the power switch is turned on.
- If you are sure that the scanner is powered on, contact your dealer.

The computer does not start up. If your computer is a Macintosh, a little floppy disk with a question mark appears on your screen.

Your computer cannot find its hard disk due to a conflict with the SCSI ID numbers of the devices you have attached.

- Disconnect all SCSI devices (except the start-up disk) and connect them one by one, beginning with the scanner, to identify the device that causes the problem (switch off all devices before connecting or disconnecting them).

The scanner software cannot find the scanner

After opening the Scan dialog box, a message appears telling you that no scanner is connected, although the scanner is connected.

- Check the Installation procedure, to see if you followed the instructions. Pay special attention to the setting of the SCSI ID number.
- Maybe you did not wait long enough for all SCSI devices to start up, before you switched your computer on. Try restarting your computer.
- Disconnect all SCSI devices and connect them one by one, beginning with the scanner, to identify the device that causes the problem.

The scanner reports errors during scanning

- Check if you have connected a SCSI terminator. If this can not be the problem, please contact your dealer.

❖ Note: If you encounter other problems during or after installation, please refer to the FotoLook ReadMe file on your computer, or the SCSICARD help file on the Agfa Scanners CD-ROM.

Appendix B — Technical information on the SnapScan 310

This appendix provides some technical information about your SnapScan 310.

Technical specifications are subject to change without notice.

Scanner type:	Desktop, flatbed, one pass
Maximum resolution:	
- optical:	300 ppi horizontal x 600 ppi vertical
- through interpolation:	4800 ppi horizontal x 4800 ppi vertical
Sample depth:	10 bits for gray, 30 bits for color
Scanning speed:	
- line-art:	3 ms / line
- gray:	3 ms / line
- color:	8 ms / line
Maximum scanning area:	216 x 297 mm (8.5 '' x 11.7 '')
Lamp:	cold cathode
Power-on to ready time:	≤ 15 seconds
Power supply:	
- voltage:	100 V to 240 V
- frequency:	47 Hz to 63 Hz
Dimensions:	
- length:	445 mm
- width:	330 mm
- height:	105 mm
- weight:	ca. 4 kg
Interface:	SCSI-2 2 x 25-pin connector
Transmission speed:	2 Mbyte/s
Environmental specifications:	
- operating temperature:	+10 °C to +40 °C (+50 to +104 degrees Fahrenheit)
- relative humidity:	20% to 85% RH
- surrounding space:	10 cm on every side

Appendix C — SnapScan regulation compliance

Safety regulations

Electromagnetic interference

Safety regulations

SnapScan and its options are designed to comply with:

UL 1950-D3

CSA C22.2 No. 950 - M89 D3

VDE 805

IEC 950

GS approved

EN 60950

UL Safety Statement

Instructions for power supply cord selection:

For modules set at 115V:

Use a UL listed, Type SVT or SJT cord, three conductor, rated 10 A 125 V, not to exceed 15ft in length.

Caution: For the reason of safety, besides the personal maintenance mentioned in this operation manual, don't try to remove any mechanical parts or any electronic devices. If you need service, our dealer and service offices are available to help you.

FTZ: Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt dass der Image Scanner in Übereinstimmung mit den Bestimmungen der vfg 243/1991 funk-entstört ist.

Der Deutschen Bundespost wurde das inverkehrbringen dieses Gerätes angezeigt und Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeraumt.

TÜV: Wichtige Sicherheitshinweise

1. Bitte Lesen Sie sich diese Hinweise sorgfältig durch.
2. Um eine Beschädigung des Gerätes zu vermeiden sollten Sie nur Zuberhörteile verwenden, die vom Hersteller zugelassen sind.
3. Das Gerät ist vor Feuchtigkeit zu schützen.
4. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Verletzungen hervorrufen. Verwenden Sie nur sichere Standorte und beachten Sie die Aufstellhinweise des Herstellers.
5. Die Belüftungsöffnungen dienen zur Luftzirkulation die das Gerät vor Überhitzung schütz. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
6. Die Netzanschulßsteckdose muß aus Gründen der elektrischen Sicherheit einen Schutzleiterkontakt haben.
7. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.
8. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von authorisiertem Servicepersonal geöffnet werden.
9. Die Steck dose sollte nahe dem Gerät und leicht zugänglich sein.

Electromagnetic interference

SnapScan is designed to comply with:

VDE 0871, class B

VDE 0875, level N

FCC 20718, part 15, subpart B, class B

Federal Communications Commission Radio Frequency Interference Statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

Notice:

(1) The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

(2) Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

Canadian department of Communications

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques (de la classe B) prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.